Chapter 296-96 WAC
SAFETY REGULATIONS AND FEES FOR ALL ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER CONVEYANCES

WAC 296-96-00650 Which National Elevator Codes and Supplements has the department adopted?

NATIONAL ELEVATOR CODES AND SUPPLEMENTS ADOPTED

TYPE OF CONVEYANCE	NATIONAL CODE AND SUPPLEMENTS	DATE INSTALLED FROM	DATE INSTALLED TO	COMMENTS
Elevators, Dumbwaiters, Escalators	American Standard Safety Code (ASA) A17.1, 1960	Prior to 11/1/1963		Adopted Standard Part X of ASA applies to all installations in existence prior to 11/1/63.
Elevators, Dumbwaiters, Escalators	American Standard Safety Code (ASA) A17.1, 1960	11/1/1963	12/29/1967	Adopted Standard
Moving Walks	American Safety Association A17.1.13, 1962	11/1/1963	12/29/1967	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	U.S.A. Standards (USAS) USAS A17.1, 1965; Supplements A17.1a, 1967; A17.1b, 1968; A17.1c, 1969;	12/30/1967	2/24/1972	Adopted Standard USAS 1965 includes revision and consolidation of A17.1.1, 1960, A17.1a, 1963, and A17.1.13, 1962. Adopted code and supplements, excluding Appendix E and ANSI 17.1d, 1970.
Elevators, Dumbwaiters, Escalators, and Moving Walks	American National Standard Institute ANSI A17.1, 1971	2/25/1972	6/30/1982	Adopted Standard as amended and revised through 1971.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1971; A17.1a, 1972	2/25/1972	6/30/1982	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1981	7/1/1982	1/9/1986	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1982	3/1/1984	1/9/1986	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1983	12/1/1984	1/9/1986	Adopted Supplement, except portable escalators covered by Part VIII of A17.1b, 1983.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1984	1/10/1986	12/31/1988	Adopted Standard Except Part XIX. After 11/1/1988 Part II, Rule 211.3b was replaced by WAC 296-81-275.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1985	1/10/1986	12/31/1988	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1985; A17.1c, 1986; A17.1d, 1986; and A17.1e, 1987	12/6/1987	12/31/1988	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1987	1/1/1989	12/31/1992	Adopted Standard Except Part XIX and Part II, Rule 211.3b. WAC 296-81-275 replaced Part II, Rule 211.3b.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1990	1/1/1993	2/28/1995	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1993	3/1/1995	6/30/1998	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 1996	6/30/1998	6/30/2004	Adopted Standard Except Part V, Section 513.
Elevators, Dumbwaiters,	ASME A17.1, 2000; A17.1a,	7/01/2004	12/31/2006	Adopted Standards and Addenda Except Rules

Escalators, and Moving Walks	2002; A17.1b, 2003			2.4.12.2, 8.6.5.8 and Sections 5.4, 7.4, 7.5, 7.6, 7.9, 7.10, 8.10.1.1.3 and 8.11.1.1.
Safety Standards for Platform Lifts and Stairway Chairlifts	ASME A18.1, 1999; A18.1a, 2001; A18.1b, 2001	7/01/2004	12/31/2006	Adopted Standards and Addenda.
Safety Code for Elevators, Escalators, Dumbwaiters, Residential elevators, special purpose	ASME A17.1-2004; A17.1a-2005; A17.1S-2005	01/01/2007	Current	Adopted Standards and Addenda Except Rules 2.4.12.2= marked car top clearance space, 8.6.5.8= Maintenance of safety bulkhead, 5.4= Private residence incline elevators, 7.4 & 7.5 & 7.6 & 7.9 & 7.10 Material lifts, 8.10.1.1.3 and 8.11.1.1= QEI-1 inspector.
Safety Code for Platform Lifts and Stairway Chairlifts	ASME A18.1-2005	01/01/2007	Current	
Safety Code for Belt Manlifts	ASME A90.1-2003	01/01/2007	Current	
Safety Code for Personnel Hoists, Retro-active	ANSI A10.4-2004	01/01/2007	Current	

Note: Copies of codes and supplements can be obtained from The American Society of Mechanical Engineers, Order Department, 22 Law Drive, Box 2900, Fairfield, New Jersey, 07007-2900 or by visiting www.asme.org.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-00650, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-00650, filed 12/22/00, effective 1/22/01.]

WAC 296-96-00700 Chapter definitions. The following definitions apply to this chapter (see RCW 70.87.010 for additional definitions necessary for use with this chapter):

"ANSI" means the American National Standard Institute.

"ASA" means the American Safety Association.

"ASME" means the American Society of Mechanical Engineers.

"Acceptable proof" refers to the documentation that must be provided to the department during the elevator contractor and mechanic license application and renewal process. Acceptable proof may include department-approved forms documenting years of experience, affidavits, letters from previous employers, declarations of experience, education credits, copies of contractor registration information, etc. Additional documentation may be requested by the department to verify the information provided on the application.

"Code" refers to nationally accepted codes (i.e., ASME, ANSI, ASA, and NEC) and the Washington Administrative Code.

"Decommissioned conveyance" means an installation whose power feed lines have been disconnected and:

(a) A traction elevator, dumbwaiter, or material lift whose suspension ropes have been removed, whose car and counterweight rests at the bottom of the hoistway, and whose hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side;

(b) A hydraulic elevator, dumbwaiter, or material lift whose: Car rests at the bottom of the hoistway, pressure piping has been disassembled and a section removed from the premises, hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side, suspension ropes have been removed and counterweights, if provided, landed at the bottom of the hoistway; or

(c) An escalator or moving walk whose entrances have been permanently barricaded.

NOTE: An inspection by the department is required upon completion of decommission work.

"Final judgment" means any money that is owed the department as the result of an individual's or firm's unsuccessful appeal of a civil penalty. Final judgment also includes any penalties assessed against an individual or firm owed the department as a result of an unappealed civil penalty or any outstanding fees due under chapter 70.87 RCW and this chapter.

"General direction -- Installation and alteration work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) who is on the same job site as the helper/apprentice at least seventy-five percent of each working day. The ratio of helper to mechanic shall be one-to-one.

"General direction -- Maintenance work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) to ensure that the maintenance work is performed safely and to code.

"Lockout" means the placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

"Primary point of contact" is the designated individual employed by a licensed elevator contractor.

"Red tag" or **"red tag status"** means an elevator or other conveyance that has been removed from service and operation because of noncompliance with chapter 70.87 RCW and this chapter or at the request of the owner.

"Private residence elevator" (residential elevator) means a power passenger elevator which is limited in size, capacity, rise and speed and is installed in a private residence or multiple dwelling as a means of access to a private residence provided the elevators are so installed that they are not accessible to the general public or to other occupants in the building.

"RCW" means the Revised Code of Washington.

"Tagout" means the placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed by the individual who established the tag.

"Traction elevator" means an elevator in which the friction between the hoist ropes and the machine sheave is used to move the elevator car.

"USAS" means the U.S.A. Standards.

"WAC" means the Washington Administrative Code.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-00700, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-00700, filed 12/22/00, effective 1/22/01.]

PART B - Elevator Contractor and Conveyance Mechanic LICENSES Regulations AND FEES.

NOTE: Total fees include the sum of the permit cost plus plan check fees.

WAC 296-96-00902 Are there exceptions from the elevator mechanic licensing requirements? Yes.

(1) Elevator mechanic licenses issued under chapter 70.87 RCW and this chapter are not required for:

(a) Individuals who install signal systems, fans, electric light fixtures, illuminated thresholds, finished cab

flooring materials that are identical to existing and feed wires to the terminals on the elevator main line control provided that the individual does not require access to the pit, hoistway, or top of the car for the installation of these items.

(b) An owner or regularly employed employee of the owner performing only maintenance work of conveyances in accordance with RCW 70.87.270.

(2) Elevator mechanic licenses may not be required for certain types of incidental work that is performed on conveyances when the appropriate lockout and tagout procedures have been performed by a licensed elevator mechanic in the appropriate category. The department must be notified in writing and must approve the scope of work prior to it being performed.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-00902, filed 5/28/04, effective 6/30/04.]

WAC 296-96-00904 What must you do to become and remain a licensed elevator contractor? (1) Obtain and maintain a valid specialty or general contractor registration under chapter 18.27 RCW to engage in the business of conveyance work.

(2) Complete and submit a department-approved application. As part of the application:

(a) Specify the employee who is the licensed elevator contractor's primary point of contact.

(b) The *person, firm or company who is applying for the elevator contractor's license must:

(i) Provide acceptable proof to the department that shows that the *person, firm, or company has five years of work experience in performing conveyance work as verified by current and previous State of Washington elevator contractor licenses to do business; or

(ii) Pass a written examination administered by the department on chapter 70.87 RCW and this chapter. (In the case of a firm or company, the exam will be administered to the designated primary point of contact.)

(iii) Failure to pass the examination will require the submittal of a new application.

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application of a license under this section if the applicant owes outstanding final judgments to the department.

(5) If the primary point of contact identified in subsection (2)(a) of this section separates employment, his/her relationship or designation is terminated, or death of the designated individual occurs, the elevator contractor must, within ninety days, designate a new individual who has successfully completed the elevator contractor examination and inform the department of the change in writing or the elevator contractor license will be automatically suspended.

* individual responcible for managing the company

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-00904, filed 5/28/04, effective 6/30/04.]

WAC 296-96-00906 What must you do to become a licensed elevator mechanic? (1) Qualify for licensing:

(a) For conveyance work covered by all categories identified in WAC 296-96-00910 except material lifts (05), residential conveyances (06), residential inclined elevators (07) and temporary licenses (09), the applicant must comply with the applicable mechanic licensing requirements as follows:

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than three years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state or as an employee of a public agency; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than three years' work experience in the elevator industry, performing conveyance work, as verified by current and previous employers licensed to do business in this state or as an employee of a public agency; and

(B) Have worked without direct and immediate supervision for an elevator contractor licensed to do business in this state or as an employee of a public agency. This employment may not be less than three years immediately before March 1, 2004.

(iii) National exam/education.

(A) Have obtained a certificate of completion and successfully passed the mechanic examination of a nationally recognized training program for the elevator industry such as the National Elevator Industry Educational Program or its equivalent; or

(B) Have obtained a certificate of completion of an apprenticeship program for an elevator mechanic, having standards substantially equal to those of chapter 70.87 RCW and this chapter, and registered with the Washington state apprenticeship and training council under chapter 49.04 RCW.

(iv) Reciprocity. The applicant must provide acceptable proof to the department that shows that the applicant is holding a valid license from a state having entered into a reciprocal agreement with the department and having standards substantially equal to those of chapter 70.87 RCW and this chapter.

(b) For conveyance work performed on material lifts as identified in WAC 296-96-00910(5):

(i) Test.

(A) The applicant and the licensed elevator contractor/employer must comply with the provisions of RCW 70.87.245; and

(B) The applicant must pass an examination administered by the department on chapter 70.87 RCW and this chapter;

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the material lift license category (see WAC 296-96-00910) performing conveyance work on material lifts, as verified by current and previous employers licensed to do business in this state; and

(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than three years immediately before March 1, 2004.

(c) For residential conveyance work covered by category (06) as identified in WAC 296-96-00910:

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC

296-96-00910) of not less than two years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the residential conveyance license category (see WAC 296-96-00910) performing conveyance work on residential inclined and vertical wheelchair lifts and stair chairlifts, as verified by current and previous employers licensed to do business in this state; and

(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than two years immediately before March 1, 2004.

(d) For residential inclined conveyance work covered by category (07) as identified in WAC 296-96-00910;

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than one year's work experience in the elevator industry or not less than three years' documented experience and education credits in conveyance work as described in category (01) performing conveyance work as verified by current and previous employers licensed to do business in this state; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(ii) Grandfather.

(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the residential inclined conveyance license category (see WAC 296-96-00910) performing conveyance work on residential inclined conveyances, as verified by current and previous employers licensed to do business in this state; and

(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than one year immediately before March 1, 2004.

(e) For temporary mechanic licenses as identified in WAC 296-96-00910 category (09) the applicant must provide acceptable proof from a licensed elevator contractor that attests that the temporary mechanic is certified as qualified and competent to perform work under chapter 70.87 RCW and this chapter and.

a) Be enrolled in a training program for conveyance mechanics.

b) Successfully completed a minimum of 1 year of the training program course.

(2) Complete and submit a department-approved application.

(a) **Applications received before October 1, 2004.** If an applicant who meets subsection (1)(d)(i)(A) of this section, who applies before October 1, 2004, and is required to take an examination under the provisions of this section, the applicant may perform the duties of a licensed elevator mechanic until the applicant has been provided notice by the department of the results of his/her examination.

(b) **Applications received on or after October 1, 2004.** An applicant who is required to take an examination under the provisions of this section may not perform the duties of a licensed elevator mechanic until the applicant has been notified by the department that he/she has passed the examination.

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application of a license under this section if the applicant owes outstanding

final judgments to the department. Or does not meet the minimum criteria established in RCW and this chapter.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-00906, filed 5/28/04, effective 6/30/04.]

PART B-1 - PERMIT REGULATIONS & FEES, PENALTIES AND INSPECTION TYPES FOR ALL CONVEYANCES

WAC 296-96-01000 What is the permit process for conveyances?

(1), Prior to construction, alteration, or relocation of any conveyance, the licensed elevator contractor shall;

a) Submit an installation application to the department. See WAC 296-96-01010 through 296-96-01025.

b) Construction, relocation and some alterations of all conveyances (this includes both private residence and commercial conveyances) plans must be submitted to and approved by the department. See WAC 296-96-01030.

c)) Prior to the start of the construction, alteration, or relocation there must be an approved permit from the department on the jobsite.

d) Your conveyance must be inspected upon completion of the construction, alteration, or relocation. See WAC 296-96-01035.

(2) The owner must obtain and renew an annual operating certificate for each conveyance that they own, except for residential conveyances. See WAC 296-96-01065.

(3) After initial purchase and inspection, private residence conveyance(s) do not require an annual permit. However, annual inspections may be conducted upon request. See WAC 296-96-01045 for the associated fees.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-01000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01000, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01005 Will a permit expire?

(1) see wac 1000

(2) Construction and alteration permits are valid for one year from the date of issue. However, permits may be renewed if you:

(a) Apply for a renewal permit before your current permit expires;

(b) The department approves your request for a renewal permit; and

(c) You pay a fifty-dollar renewal fee to the department for each permit you renew;

(3) If your permit has expired you must reapply for a new permit.

(4) (see wac 1006

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-01005, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. 03-12-045, § 296-96-01005, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01005, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01006 What type of conveyance work requires permitting and inspection?

(1) All installations and relocation of conveyances requires permitting and inspection. All conveyance work must be performed by an elevator mechanic licensed to perform work in the appropriate category. (See WAC 296-96-00910).

(2) All alterations and other conveyance work requires permitting and inspection and includes but is not limited to:

(a) Items identified in ASME A17.1.

(b) Any conveyance work that requires the conveyance to be tested prior to being returned to service, including:

(i) The replacement or repair of any parts, the installation of which would require recalibration or testing (e.g., brakes, hydraulic valves and piping, safeties, door reopening devices, governors, communication systems, cab interiors, car/hall buttons, etc.); or

(ii) Work performed on components or equipment affecting or necessary for fire and life safety (e.g., cab interiors, systems associated with fire recall, etc.).

(3) You are not required to obtain permits and pay fees for repairs and replacement associated with normal functions and necessary maintenance done with parts of equivalent materials, strength and design (see A17.1 for definitions) ; or for any conveyance exempted by RCW 70.87.200.

Contact the department if you have any questions or need assistance determining if a permit and inspection are required. Special permits will be required for non-elevator companies performing detection and sprinkler systems upgrades. These permits will require signoff by the elevator company on record with the affected building.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-01006, filed 5/28/04, effective 6/30/04.]

Moved to part “C” should it be in Sub section IV?
WAC 296-96-01009 Who can purchase a permit? The department may only issue a permit for conveyance work to a licensed elevator contractor.

Permits are only required for alterations, relocations and installations. Beginning with July 1,2004, the homeowner will no longer be allowed to purchase a permit.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-01009, filed 5/28/04, effective 6/30/04.]

WAC 296-96-01025 What is the permit fee for personnel and material hoists? The fee for each personnel hoist or material hoist installation is $200.00

See WAC 296-96-01035 (2) for requirements to jumps.

Note: An operating permit is also required for these types of conveyances.

[Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. 02-12-022, § 296-96-01025, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01025, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01030 What is the process for installation and alteration plan approval?

Prior to the start of construction, the applicant must submit to the department for approval two copies of plans for new installations or major alterations.

To be approved, the plan must comply with the latest adopted edition of the American Society of Mechanical Engineers (ASME), the National Electrical Code (NEC) and applicable Washington Administrative Codes (WAC).

In addition, the plans must include all information necessary in determining whether each installation/alteration complies with all applicable codes.

The permit holder must keep a copy of the approved plan on the job site until the department has witnessed all acceptance tests.

Any alterations to the approved plan must be submitted to the department for approval before a final inspection will be conducted. The nonrefundable fees for reviewing your plans are:

For each installation/major alteration $25.70

If more than two sets of plans are submitted, the fee for each additional set $10.30

[Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. 05-12-032, § 296-96-01030, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. 03-12-045, § 296-96-01030, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. 02-12-022, § 296-96-01030, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. 01-12-035, § 296-96-01030, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01030, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01035 Are there inspection fees?

Yes. The initial inspection of a conveyance or for the initial inspection of construction, alteration or relocation of a conveyance is included with your permit fee. Once the department has approved the initial installation of the conveyance you will be issued a temporary operating certificate that is valid for 30 days.

Prior to the expiration of the 30-day temporary operating certificate the application for an annual operating certificate and the appropriate fees must be paid to the department. Once the department has received the appropriate fees and application the owner will be issued the first annual operating certificate. The owner or owners' reprehensive receives an invoice from the department for renewal. The owner is required to renew the annual operating certificate yearly.

The following inspections require an additional inspection fee:

(1) **Reinspection.** If a conveyance does not pass an initial inspection(s) and an additional inspection is required, the fee for each reinspection of a conveyance is $103.00 per conveyance plus $50.00 per hour for each hour in addition to the first hour.

The department may waive reinspection fees.

(2) **Inspecting increases in the height (jumping) of personnel and material hoists.**

The fee for inspecting an increase in the height (jumping) of each personnel hoist or material hoist is $103.00 plus $51.50 per hour for each hour in addition to 2 hours. This fee is for inspections occurring during regular working hours.

a) The permit holder may be allowed to operate a hoist prior to the jump inspection if

1) The electrical limits will not allow the lift to operate above the previously inspected landing.

2) The state elevator inspector is contacted, agrees and can schedule within 3 days???????.

(3) **Variance inspections.**

(a) The fee for an on-site variance inspection is $154.50 per conveyance plus $51.50 per hour for each hour in addition to 2 hours. This fee is for inspections occurring during regular working hours.

(b) The fee for a variance that does not require an on-site inspection is $51.50 per conveyance. The individual requesting the variance must provide the department with pictures, documentation, or other information necessary for the department to review the variance. The department may conduct an on-site variance inspection to verify the information provided or if it determines that an inspection is necessary. If an on-site variance inspection is performed, the fees in (a) of this subsection will apply.

(4) **"Red tag" status fee.** The annual fee for a conveyance in "Red tag" status is $25.70.

Note: You must provide the department with written approval from the building official, indicating that the conveyance is not required for building occupancy, when you apply to have the conveyance placed in voluntary red tag status.

(5) **Decommission inspection.** The fee for performing a decommission inspection is $51.50. Once the decommission inspection has been performed and approved, the conveyance will no longer require annual inspections until such time that the conveyance is brought back into service. Prior to operating the conveyance, a new inspection and annual operating permit must be obtained.

(6) **Voluntary inspections by request.** The owner or potential purchaser of a building within the department's jurisdiction may request a voluntary inspection of a conveyance. The fee for this inspection will be $103.00 per conveyance and $51.50 per hour for each hour in addition to 2 hours plus the standard per diem and mileage allowance granted to department inspectors. The owner/potential purchaser requesting the voluntary inspection will not be subject to any penalties based on the inspector's findings.

[Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. 05-12-032, § 296-96-01035, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-01035, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. 02-12-022, § 296-96-01035, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. 01-12-035, § 296-96-01035, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01035, filed 12/22/00,

effective 1/22/01.]

WAC 296-96-01040 What is the fee for inspecting passenger and freight elevators used as temporary construction elevators to provide transportation for construction personnel, tools, and materials only?

(1) The fee for the inspecting of elevators used as temporary construction elevators is $82.40, in addition to any other fees required in this chapter. This fee purchases a 30-day temporary construction use permit that may be renewed at the department's discretion.

(2) When this temporary use permit is purchased, a notice declaring that the equipment has not received final approval from the department must be conspicuously posted in the elevator.

(3) The elevator inspection will consist of the requirements found in A17.1- **SECTION 5.10 ELEVATORS USED FOR CONSTRUCTION and WAC 296-96-2232 (Inspection criteria Move to 02232)**

[Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. 05-12-032, § 296-96-01040, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. 02-12-022, § 296-96-01040, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. 01-12-035, § 296-96-01040, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01040, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01045 What are the inspection requirements and fees for conveyances in private residences? (1) Chapter 70.87 RCW requires the department to inspect all new, altered or relocated conveyances operated exclusively for single-family use in private residences. Prior to inspection, a licensed elevator company must complete a permit application as described in WAC 296-96-01005 and pay the appropriate fee listed in WAC 296-96-01010.

(2) Chapter 70.87 RCW allows the department to inspect conveyances operated exclusively for single-family use in private residences when the department is investigating an accident or an alleged or apparent violation of the statute or these rules.

(3) No annual inspection and operating certificate is required for a private residence conveyance operated exclusively for single-family use unless the owner requests it. When an owner requests an inspection and an annual operating certificate, the following fee must be paid prior to an inspection:

TYPE OF CONVEYANCE	FEE
Each inclined stairway chair lift in private residence	$24.10
Each inclined wheel chair lift in a private residence	24.10
Each vertical wheel chair lift in a private residence	30.40
Each dumbwaiter in a private residence	24.10
Each inclined elevator at a private residence	85.70
Each private residence elevator	55.20
Duplication of a lost, damaged or stolen operating permit	10.30

[Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. 05-12-032, § 296-96-01045, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. 02-12-022, § 296-96-01045, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. 01-12-035, § 296-96-01045, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01045, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01055 Are technical services available and what is the fee? You may request elevator field technical services from the department by paying a fee of $61.80 per hour (including travel time) plus the standard per diem and mileage allowance granted to department inspectors. These field technical services may include accident investigation, code evaluation, code consultation, plan examination, code interpretation and clarification of technical data relating to the application of the department's conveyance rules. Field technical services do not include inspections, except as may be required during an accident investigation.

[Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. 05-12-032, § 296-96-01055, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. 03-12-045, § 296-96-01055, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. 02-12-022, § 296-96-01055, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. 01-12-035, § 296-96-01055, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01055, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01065 What are the annual operating certificate fees? An annual operating certificate will be issued to you upon payment of the appropriate fee. The owner of record will be invoiced by the department, if a change of owner has occurred it is the new owners responcibility to ensure the department has the corrected information. Below is the fee structure table: (missing hoistway openings and floor information)

TYPE OF CONVEYANCE	FEE
Each hydraulic elevator	$103.00
Each roped-hydraulic elevator	128.70
plus for each hoistway opening in excess of two	10.30
Each cable elevator	128.70
plus for each hoistway opening in excess of two	10.30
Each cable elevator traveling more than 25 feet without an opening--for each 25 foot traveled	10.30
Each limited-use/limited-application (--LULA) elevator	103.00
Each escalator	85.60
Each dumbwaiter in other than a private	55.20

residence	
Each material lift	103.00
Each incline elevator in other than a private residence	110.70
Each belt manlift	103.00
Each stair lift in other than a private residence	55.20
Each wheel chair lift in other than a private residence	55.20
Each personnel hoist	103.00
Each grain elevator personnel lift	85.60
Each material hoist	103.00
Each special purpose elevator	103.00
Each private residence elevator installed in other than a private residence	103.00
Each casket lift	85.60
Each sidewalk freight elevator	85.60
Each hand-powered manlift or freight elevator	58.00
Each boat launching elevator	85.60
Each auto parking elevator	85.60
Each moving walk	85.60
Duplication of a damaged, lost or stolen operating permit	10.30

[Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. 05-12-032, § 296-96-01065, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. 02-12-022, § 296-96-01065, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. 01-12-035, § 296-96-01065, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01065, filed 12/22/00, effective 1/22/01.]

WAC 296-96-01070 What are the civil (monetary) penalties for violating the conveyance permit and operation requirements of chapter 70.87 RCW and this chapter? (1) Any licensee, installer, owner or operator of a conveyance who violates a provision of chapter 70.87 RCW or this chapter shall be subject to the following civil penalties:

(a)	Operation of a conveyance without a permit:	
	First violation	$154.50
	Second violation	309.00
	Each additional violation	500.00

	. .	
(b)	Installation of a conveyance without a permit:	
	First violation	$154.50
	Second violation	309.00
	Each additional violation	500.00
	. .	
(c)	Relocation of a conveyance without a permit:	
	First violation	$154.50
	Second violation	309.00
	Each additional violation	500.00
	. .	
(d)	Alteration of a conveyance without a permit:	
	First violation	$154.50
	Second violation	309.00
	Each additional violation	500.00
	. .	
(e)	(i) Operation of a conveyance for which the department has issued a red tag or has revoked or suspended an operating permit or operation of a decommissioned elevator	
	. .	$500.00
	(ii) Removal of a red tag from a conveyance	$500.00
(f)	Failure to comply with a correction notice:	
	After 90 days	$100.00
	After 180 days	250.00
	After 270 days	400.00
	After 360 days	500.00
	Each 30 days after 360 days	500.00
	. . . .	
	Note: Penalties cumulate	
(g)	Failure to submit official written notification or *falseification of the notification that all corrections have been completed:	
	After 90 days	$100.00
	After 180 days	250.00
	After 270 days	400.00
	After 360 days	500.00
	Each 30 days after 360 days	500.00
	. . . .	

	Note: Penalties cumulate	
(h)	Failure to notify the department of each accident to a person requiring the services of a physician or resulting in a disability exceeding one day may result in a $500.00 penalty per day. The conveyance must be removed from service until the department authorizes the operation of the conveyance. This may require an inspection and the applicable fees will be applied. Failure to remove the conveyance from service may result in an additional $500.00 penalty per day.	500.00 Plus WAC 269-96-01055

(2) A violation as described in subsection (1)(a), (b), (c), and (d) of this section will be a "second" or "additional" violation only if it occurs within one year of the first violation.

(3) The department must serve notice by certified mail to an installer, licensee, owner, or operator for a violation of chapter 70.87 RCW, or this chapter.
* Penalty cumulate from the original correction date.

[Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. 05-12-032, § 296-96-01070, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-01070, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-01070, filed 12/22/00, effective 1/22/01.]

PART C - REGULATIONS FOR NEW AND ALTERED ELEVATORS AND LIFTING DEVICES

Scope; Part “C” is not intended to remove the requirements of the adopted standards, it is intended to supplement and enhance. Any conflicts with part C and the adopted standards the WAC take precedent. In cases were conveyances are not recognized in an adopted standard, part C is the standard.

NOTE: The following rules set the minimum standard for all new installations and, where applicable, alterations.

WAC 296-96-02230 When must the department be notified for a new or altered inspection?

(1) The person or firm installing, relocating, or altering a conveyance shall notify the department in writing, at least seven days before requesting any inspection of the work, and shall subject the new, moved, or altered portions of the conveyance to the acceptance tests. Note: this assumes the permit has been approved.

(2) The department may grant exceptions to this notice requirement.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02230, filed 5/28/04, effective 6/30/04.]

WAC 296-96-022?? What is the inspection and approval process for alterations?

(1) The following process must be followed when performing alterations:

(a) Obtain a permit from the department prior to performing the alteration. The permit application must include detailed information on the scope of the alteration.

(b) Take the conveyance out-of-service and perform the alteration.

(c)(i) If the conveyance requires an inspection prior to being returned to service (as identified on the alteration permit), you must contact the department to perform an inspection and:

(a) If the conveyance passes the inspection, the conveyance may be placed back into service.

(b) If the conveyance fails the inspection, the conveyance must remain out-of-service until the corrections are made and approved by the department.

(ii) If the conveyance is not required to be inspected prior to being returned to service, you must contact the department to perform an inspection and:

(a) If the conveyance passes the inspection, the conveyance may remain in service.

(b) If the conveyance fails the inspection, the conveyance will be placed out-of-service until the corrections are made and approved by the department.

WAC 296-96-022?? Are additional work requirements required when performing an alteration?

(2) For certain types of alterations additional work may be required as part of the alteration and prior to approval of the conveyance. These alterations include, but are not limited to:

(a) Replacements of controllers:

(i) Fire fighter service requirements must be met in accordance with the most recent code adopted by the department.

(ii) Seismic requirements ("Derailment and or seismic switch as required") must be met in accordance with the most recent code adopted by the department. In addition, the car must be operate according to the present A17.1 seismic requirements

(iii) Lighting in the machine room and pit must comply with the most recent code adopted by the department.

(iv) Electrical outlets in the machine room and pit must be of the ground fault interrupter type.

(b) Replacement of controllers and a car operating panel and/or hall fixtures:

(i) The requirements of (a) of this subsection must be met.

(ii) All panels and fixtures must meet the applicable (e.g., height, sound, Braille, etc.) requirements in accordance with the Americans with Disabilities Act.

(c) Replacement of door operators and/or door equipment: Any changes to these items require the installation of door restrictors:

(d) Hydraulic piping: Replacement, repair, or relocation of hydraulic piping will require the installation of a rupture (overspeed) valve.

Note: The department may grant exceptions to the requirements identified in this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-01007, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02232 What are the conditions for obtaining a temporary construction operating permit?

See WAC 01040

. In order to obtain a permit: **The elevator must as a minimum adhere to:**

1) SECTION 5.10 ELEVATORS USED FOR CONSTRUCTION and;

(a) A single means of disconnecting the elevator must be provided and related equipment must be identified by the use of numbers or letters on the disconnect, the controller, the drive machine, the cross head, and the car operating panel.

(b)The key operation of Phase I must recall the elevator.

(c) A means of emergency communication with the elevator must be provided. If there is no permanent method of emergency communication an operator with communication equipment must be provided.

(d) Tests shall be conducted according to A17.1-**8.10.5.10 Elevators Used for Construction.**

(e) Hydraulic elevators with less than four stops may not be issued a temporary construction operating permit unless preapproved by the department

(f) Elevator cab interiors must be completed. Temporary cabs may be used and walls must be covered with fire retardant materials.

(g) The key operation of Phase I must recall the elevator.

(h) The elevator must pass load tests and safety circuit inspections.

(I) Temporary or permanent lights in the cab, machine room and at the landings must be provided.

(J) Machine rooms must be fully enclosed and have a lockable door.

(k) Hoistways must be fully enclosed.

(2) The person operating the permitted conveyance under this section must be properly trained in operation and safety and:

(a) The operator must be on the elevator whenever it is in use. The operator may be one of your employees.

(b) He or she must be designated to be the sole operator of the elevator.

(c) The operator must be trained in the proper operation of the elevator, the proper procedure to handle an emergency and must know who to contact in the event of an emergency involving the operation of the elevator.

(d) The operator must carry a means of two-way communication on his/her person at all times. (This may be in the form of a cell-phone, walkie-talkie, etc., providing proper reception is obtainable at all times.)

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02232, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02235 What are the requirements for temporary construction operating permits?

(1) A thirty-day temporary construction operating permit is for transportation of construction personnel and materials only, not for the transportation by the general public.

(2) Temporary construction operating permits are valid for thirty days.

(3) You must contact the department for a reinspection to renew the permit.

(4) All elevators with expired temporary construction operating permits that have not passed a final inspection may not be operated.

a) Operating an elevator with an expired permit shall result in a civil penalty (see WAC 01070 (a))

(5) Renewal of a temporary operating permit is at the discretion of the department.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02235, filed 5/28/04, effective 6/30/04.]

Machine room

WAC 296-96-02240 Where is a shut-off valve required for hydraulic elevators? Two shut-off valves may be required.

(1) ASME requires that a shut-off valve be installed in the machine room effective 01/22/01.

(2) When the pit is lower than the machine a shut-off valve must be installed in the pit. A separate shut-off valve is not required in the pit for hydraulic elevators equipped with a safety/rupture valve that rotates no more than 180 degrees to stop the flow of hydraulic fluid and has a safety shut-off handle capable of being grasped.

EXCEPTION: Limited use/limited application (LULA), special purpose and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02240, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02240, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02280 Can pipes and ducts be installed above a machine room? Electric conduit, and ducts may be installed in the upper space ("upper space" is defined as the space above the fire-rated ceiling) of the elevator machine room as long as they are installed above the required seven-foot clearance and they do not interfere with the elevator equipment which also must be installed to allow a seven-foot head clearance.

(1) Straight through runs of electrical conduit without junction boxes shall be installed in this space.

(

EXCEPTION: Residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02280, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02280, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02283 What is the minimum working space required in machine rooms? This is a clarification to the ASME A17.1

(1) In machine rooms with equipment requiring maintenance and inspection, an eighteen-inch working space must be established.

(2) There must be a minimum of eighteen inches working space (other than the required controller panel clearances) on one of the four sides of the hydraulic tank.

(3) The requirements in subsections (1) and (2) of this section do not supersede NFPA 70.

(4) The side with the hydraulic outlet pipe is not considered usable working space.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02283, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02361 What are the requirements for electrical main line disconnects? (1) The main line disconnect switch(es) or circuit breaker must be located inside the machine room door on the lock jamb side of the machine room door and not more than twenty-four inches from the jamb to the operating handle; and it must be at a height of not more than sixty-six inches above the finish floor.

(2) For multicar machine rooms the switches shall be grouped together as close as possible to that location.

(3) For machine rooms with double swing doors, the doors must swing out and the switch(es) must be on the wall adjacent to the hinge side of the active door panel.

(4) The switch(es) must be designed so that they may be locked out and tagged in the open position.

EXCEPTION: Special purpose and residential inclined elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02361, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02362 What are the requirements associated with elevator machine rooms?

(1) Panels or doors for the purpose of accessing nonelevator equipment are not permitted in elevator machine rooms. Passage through the machine room may not be used to gain access to other parts of the building that do not contain elevator equipment.

(2) The lighting control switch must be located inside the machine room within twenty-four inches of the lock jamb side of the machine room door.

(3) Cooling or venting of the elevator machine room shall be to the present building code adopted by the

state and:

(a)

(b) The operating temperature shall be established by the elevator equipment manufacturer's specifications. Where no specifications are available, the machine room temperature shall be maintained at no less than fifty-five degrees Fahrenheit and no more than one hundred degrees Fahrenheit.

(c) When standby power is connected to the elevators, the machine room ventilation or air conditioning system shall be connected to the standby power.

(i) All cooling and heating systems must be independent.

(ii) If air conditioners are used, they must service the elevator machine room only. If the air conditioner is mounted overhead, seven feet of headroom clearance must be provided from the underside of the unit to the machine room floor.

(iii) If air exchange is used, it must not exhaust air into other parts of the building.

(d) Machine rooms located in underground parking garages must have a means to exchange the air in the machine room. An "exchange of air" is completed through separate intake and exhaust systems.

EXCEPTION: The air in an underground parking garage machine room can be exchanged directly into the parking garage area.

(4) All elevators that are provided with remote elevator machine and/or control rooms must be provided with a permanent means of communication between the elevator car and the remote machine room and/or control room.

(5) Elevator machine room doors must have signs with lettering at least two inches in height with "elevator equipment room authorized personnel only - no storage."

EXCEPTION: Residential conveyances, LULAs and special purpose elevators are exempted from these requirements.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02362, filed 5/28/04, effective 6/30/04.]

Fire service, sprinklers, sprinkler pipes, shunt trip

WAC 296-96-02276 What are the requirements for sprinklers in hoistways and machine rooms?

(1) The machine room sprinkler piping must terminate in the machine room. The sprinkler piping must not run through the machine room to other spaces.

(2) The hoistway must not be used to supply sprinkler runs to more than one floor. This is a A17.1 requirement does it need to be stated here?

(3) The pit will be considered as a floor level. WHY?

(4) Sprinkler heads at the top of the shaft must terminate in the shaft. The sprinkler must not run through the hoistway to other spaces. "Other spaces" includes the machine room.

(5) All risers and returns must be located outside of the hoistway and machine room. Again this is stated in A17.1

(6) and all other requirements in ASME A17.1

(7) If a sprinkler system is added to an existing installation the conveyance will be required to:

a) Install shunt trip per WAC 296-96-02277 and

b) If the conveyance was permitted to install on or after 1/1/1989 (A17.1-1987) then the fire service must operate to the code inforced at the time of install permit. If the permit is prior to 12/31/1988 the fire service shall operate at the present day code requirements (A17.1-2.27.3.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02276, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02277 How does the department enforce ASME requirements for sprinklers, smoke detectors, and heat detectors in hoistways and machine rooms? ASME A17.2.8.2.3.2 states: "Means shall be provided to automatically disconnect the mainline power supply to the affected elevator upon or prior to the application of water from sprinklers located in the machine room or in the hoistway more than 600 mm (24 inches) above the pit floor. This means shall be independent of the elevator control and shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply." This section applies to both new and altered elevators when sprinklers have been installed in the elevator machine room and/or hoistway.

(1) The department enforces this rule as follows:

(a) When sprinkler systems are installed in an elevator hoistway, fixed temperature heat detectors WHY not rate of rise?, set only at 135°F, must be located at the top of the hoistway. If sprinklers are installed in the machine room, the same rule applies to heat detectors in the machine room. If heat detectors are installed, smoke detectors no more than 18 inches from the sprinkler and in accordace with NFPA must also be installed for elevator recall. The purpose of the heat detector is to automatically disconnect mainline power to the elevator before water flows from any sprinkler associated with the elevator system.

(b) Activation of a smoke detector or other department approved initiating device at the top of the hoistway shall cause all elevators having any equipment in that hoistway, and any associated elevators of a group automatic operation, to be returned nonstop to the designated level.

(c) Heat detectors must be:

(i) Located within 18 inches of each sprinkler head, as required by the local building official, or as required by NFPA 13.

(ii) Ceiling mounted. However, pit detectors, if installed, may only be used as a signaling device and wall-mounted if they are so designed.???

(iii) Heat detectors are not required in pits provided the automatic sprinkler heads are installed in such a way that the water spray pattern does not spray higher than three feet above the pit floor with a spray pattern directed level and down. The shunt trip disconnect must be installed in the machine room or machinery space and it must be easily identifiable.

(d) The shunt trip disconnect must be installed in the machine room or machinery space and it must be easily identifiable.

(e) Power for the automatic disconnect control circuit must be derived from a 120 volt separate branch circuit or other aragments as approved by the department. Circuit location must be identified on or next to the elevator disconnects. An illuminated visual device must be installed in the machine room adjacent to each elevator's disconnect. The purpose of this visual device is to indicate that power is available to the shunt trip activation mechanism.

(f) All electrical equipment and wiring associated with shunt trip devices must conform to the applicable

ANSI/NFPA 70.

(g) The department does not require sprinkler shut-off valves. However, where they are installed, they must be located in an accessible place outside the hoistway, machine room or machinery space with their handles placed at no more than 6 feet above the floor.

(h) Emergency return units must be disabled when the shunt trip is activated.

(2) Alternative methods used to achieve ASME A17.2.8.2.3.2 must be approved by the department prior to installation.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02277, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02277, filed 12/22/00, effective 1/22/01.]

Car

WAC 296-96-02281 What is required for emergency escape hatches? Emergency escape hatches must be hinged and secured from the car top so that the cover opens from the top of the car only. The hatch must be able to be opened without the use of tools.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02281, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02281, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02285 Are there exceptions for correction facility elevators? Facilities that require special consideration to ensure the safety of security personnel and to prevent escapes must meet the relevant requirements of ASME A17.1, except that accessible "in-car" stop switches and signaling devices are not required when the elevator operation is:

(1) Continually monitored by audio-visual equipment; and

(2) Remotely controlled from a single location.

(3) Controls necessary for an elevator's operation may be located inside a car when the operating panel has a locked cover.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02285, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02300 Are self-leveling devices required? Automatic elevators must be equipped with a self-leveling device that:

(1) Operates automatically;

(2) Stops the car at each floor landing within a tolerance of plus or minus 1/2 inch under normal loading and unloading conditions;

(3) Functions independently of the car's operating device;

(4) Corrects for over-travel and under-travel; and

(5) Always maintains the car within a tolerance of plus or minus 1/2 inch with the landing regardless of load.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02300, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02306 Is a door reopening device required on automatic-closing car doors? (1) If an elevator car door closes automatically, a door reopening device must be installed that:

(a) Stops and reopens the car door and the adjacent hoistway door whenever the car door is obstructed while closing;

(b) Is activated by a sensor, not physical contact;

(c) Is capable of sensing an object or a person in the path of the closing car door; and

(2) The sensing device can be located along the entire edge of the door. When used with a manually operated device (safety edge), a minimum of two sensing devices must be installed between 5 and 29 inches above the floor.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02306, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02310 What is the minimum acceptable initial transfer time for an elevator door? "Initial transfer time" refers to the period of time between an elevator car receiving a call for service and when the car door begins to close. The minimum acceptable initial transfer time for an elevator is:

(1) For HALL CALLS, minimum acceptable initial transfer time is based upon the distance between a point in the center of the corridor or lobby (maximum 5 feet) that is directly opposite the farthest hall button controlling the car and the centerline of the hoist-way entrance. Minimum acceptable times for specific distances are:

(a) 0-5 feet: 4 seconds;

(b) 10 feet: 7 seconds;

(c) 15 feet: 10 seconds; and

(d) 20 feet: 13 seconds.

(2) For CAR CALLS, the minimum acceptable initial transfer time for doors to remain fully open is 3 seconds.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02310, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02310, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02315 What are the minimum cab size and other applicable requirements for car interiors? (1) All car interiors must be constructed to allow wheelchair users to enter the car, to maneuver

within reach of the control panel and to exit the car.

(2) Minimum door width must be 36 inches.

(3) Minimum cab depth:

(a) From the rear wall to the return panel must be 51 inches; and

(b) From the rear wall to the inside face of the cab door must be 54 inches.

(4) For cabs with side-opening doors, the minimum cab width is 68 inches;

(5) For cabs with center-opening doors, the minimum cab width is 80 inches;

(6) Maximum clearance between a car platform sill and the edge of a hoistway landing sill must be 1 1/4 inch; and

(7) If the building official having jurisdiction determines the elevator must comply with accessibility requirements, the elevator must comply with subsections (1) through (6) of this section.

EXCEPTION 1:	Elevators located in existing school buildings or other buildings specifically identified by local authorities may have a minimum clear distance between walls or between a wall and the door, including the return panel, of 54 inches, and a minimum distance from the wall to the return panel of 51 inches.
EXCEPTION 2:	LULA, special purpose, and residential elevators must meet the specifications in ASME A17.1 pertaining to car size.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02315, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02315, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02320 What is required for car controls? (1) The following requirements apply to the location of car controls:

(a) Upon entering an elevator, at least one set of controls must be readily accessible from a wheelchair;

(b) The centerline of the alarm button and emergency stop switch must be 35 inches;

(c) Where a side approach is used, the highest floor buttons must be no higher than 54 inches from the floor;

(d) Where a forward approach is used, the highest floor buttons must be no higher than 48 inches from the floor;

(e) Emergency controls must be grouped together at the bottom of the control panel and centered at 35 inches; and

(f) Controls unessential to the elevator's operation may be located in a convenient place.

(2) The following requirements apply to the construction of control panels:

(a) Raised or flush floor registration buttons, exclusive of the panel border, must be at least 3/4 inch and arranged from left to right in ascending order.

(b) When pushed, the depth of flush buttons must not exceed 3/8 inch.

(c) Indicator lights must be installed to show each call registered and they must extinguish when a call is

answered.

(d) All markings must be located to the left of and adjacent to the car controls on a contrasting color background.

(e) All letters or numbers must be at least 5/8 inches high and must be raised .030 of an inch.

(f) Braille must be used to identify all control buttons. Permanently attached plates are acceptable.

(g) Standard ASME A17.1 symbols must be used to identify essential controls.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02320, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02320, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02325 What are the location and operation requirements for car position indicators in the car? (1) A visual car position indicator must be located either above the car control panel or above the car door.

(2) As the car passes or stops at a floor, the corresponding floor numbers must light up and a signal must sound.

(3) All numerals must be at least 1/2 inch high.

(4) All audible signals must be at least 20 decibels with a frequency no higher than 1500 Hz.

(5) The automatic announcement of a floor number may be substituted for an audible signal.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02325, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02325, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02330 What is required for installation and operation of emergency communication systems? Every elevator must contain an emergency two-way communication system. The installation and operation of this emergency communication system must comply with the ASME A17.1 code in effect when the department issued the elevator's installation permit. In addition to the appropriate ASME A17.1 code, the following department requirements apply:

(1) The communication device located in the elevator car must comply with the following:

(a) The maximum height of any operable part of the communication system is 48 inches above the floor.

(b) Raised symbols and letters must identify the communication system. These symbols and letters must be located adjacent to the communication device. The characters used must be:

(i) At least 5/8 inches but no more than 2 inches high;

(ii) Raised 1/32 inch;

(iii) Upper case;

(iv) Sans serif or simple serif type; and

(v) Accompanied by Grade 2 Braille.

(c) If the system is located in a closed compartment, opening the door to the compartment must:

(i) Require the use of only one hand without tight grasping, pinching, or twisting of the wrist; and

(ii) Require a maximum force of 5 pounds.

(d) The emergency communication system must not be based solely upon voice communication since voice-only systems are inaccessible to people with speech or hearing impairments. An indicator light must be visible when the telephone is activated. This nonverbal means must enable the message recipient to determine the elevator's location address and, when more than one elevator is installed, the elevator's number.

(e) The emergency communication system must use a line that is capable of communicating with and signaling to a person or service that can respond appropriately to the emergency at all times.

(2) A communication device must be installed in the lobby adjacent to the Phase I key switch. This device must be a two-way communication device used to communicate with individuals in the elevator.

(a) The height of any communication device(s) located in the lobby must be located between 48-60 inches above the floor.

(b) Additional communication device(s) may also be located in other parts of the building in addition to the one located in the lobby.

(c) Exception: Elevators that have less than sixty feet of travel do not require an intercom.

(3) Subsections (1) and (2) of this section do not apply to special purpose elevators. However, residential, and special purpose elevators must have a means of communication located inside the elevator cab. This communication device must be available at all times.

EXCEPTION: Residential inclined elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02330, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02330, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02340 What requirements apply to the size and location of car handrails? (1) A handrail must be installed on all car walls not used for normal exits. The hand rails must be:

(a) Desined an installed as to the ANSI A117.1 code in effect via the state building code, and Cannot find it now Becky help me locate a handrail standard

(d) Constructed with a cross-section shape that is substantially oval or round;

(e) Constructed with smooth surfaces and no sharp corners.

Approaching handrail ends on a blank wall in the interior corners of a car do not have to return to the wall. However, if the handrail is located on the closing door wall of a single-slide or two-speed entrance elevator and it projects an abrupt end towards people entering the car, the handrail end must return to the wall.

(2) Residential elevators must have at least one handrail. The handrail must be installed on a car wall not used for normal exits.

EXCEPTION: Special purpose elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02340, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02340, filed 12/22/00, effective 1/22/01.]

Hoistway & Pit

WAC 296-96-02290 What are the requirements for underground hydraulic elevator pipes, fittings, and cylinders? All newly installed underground pressure cylinders and pipes containing hydraulic elevator fluids shall be encased in an outer plastic containment.

(1) The plastic casing shall be constructed of polyethylene or polyvinyl chloride (PVC). The plastic pipe wall thickness must not be less than 0.125 inches (3.175 mm). The casing shall be capped at the bottom and all joints must be solvent or heat welded.

(2) The casing shall be sealed and dry around hydraulic pipe and cylinder to contain any leakage into the ground and to prevent electrolysis to the hydraulic pipe and the cylinder. Dry sand may be used to stabilize the hydraulic cylinder.

(3) A one-half inch pipe nipple with a one-way check valve shall be located between the casing and cylinder for monitoring purposes. The system shall be monitored on a annual routine basis, any fluid accumulation shall be removed, measured with appropriate action taken.

(4) Alternate methods must receive approval from the department prior to installation.

(5) This rule shall apply to all conveyances with installation permits issued by the department on or after the effective date of these rules. ???

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02290, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02364 What are the requirements for accessing elevated elevator pit equipment? Where elevated pit equipment requires assisted vertical access of more than five feet, a permanent noncombustible working platform shall be provided. Access to the platform must be by a fixed ladder or stair conforming to ANSI A14.3. The platform shall be of sufficient strength to support personnel and may be of open grillwork.

In residential installations where the pit depth exceeds three feet, a fixed vertical ladder, designed to the current adopted rules for commercial installations, must be provided.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02364, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02366 What are the requirements for submersible pumps or sumps? Sump pumps and drains are not required in elevator pits. Sump holes must be installed and measure a minimum of 18" x 18" x 18". If drains or sump pumps are installed they must not be directly connected to sewers and/or storm drains. P-traps and check valves are not allowed. All installations must meet the NEC and all plumbing codes.

Sump hole covers must be designed to withstand a load of three hundred pounds per square foot.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02366, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02367 What are the requirements for top of car lighting for freight and passenger elevators? A permanently wired work light and outlet shall be installed on the top of freight and passenger elevators. The light(s) shall provide illumination of 10-foot candles across the entire horizontal plane of the top of the car up to a height of six feet. The fixture(s) shall be protected from accidental breakage.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02367, filed 5/28/04, effective 6/30/04.]

Outside Hoistway

WAC 296-96-02278 Are keys required to be on-site? Yes. The keys to the machine room and the keys that are necessary to operate the elevator must be located in a locked key retainer box in the elevator lobby at the designated level above the hall buttons; or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage through locked doors. If in order to meet this requirement the box would be located in a unsecure location (such as the outside portion of a condo) other arangments shall be accomidated with the written permission of the department.

The key retainer box must be:

- Readily accessible to authorized personnel;
- Clearly labeled ELEVATOR";
- Securely mounted; and
- Equipped with a 1-inch mortice cylinder cam lock with ILCO 1145E Keyway set to a #39504 Fort type key and securely mounted.

Further:

- Keys for access to elevator machine rooms and for operating elevator equipment must be tagged and kept in the key box.
- The key box must contain all keys necessary for inspection of the elevator.
- Mechanical hoistway access devices must be located in the key box or machine room.

EXCEPTION: Residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02278, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02278, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02350 What requirements apply to floor designations on elevator door jambs? Floor designations must be:

Desined an installed as to the ANSI A117.1 code in effect via the state building code, and

(1) Located on both sides of the doorjamb at each hoist-way entrance;

(2) Visible from within the car and from the lobby;

(3) Positioned on a centerline height of 60 inches above the floor;

(4) Two inches high and raised 3/10 inch;

(5) Placed on a contrasting color background; and

(6) Accompanied by Grade 2 Braille.

(7) Permanently attached (meaning tools required to remove). * City of Seattle

EXCEPTION: Special purpose and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02350, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02350, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02355 What are the installation and operation requirements for hall buttons?

(1)) Desined an installed as to the ANSI A117.1 code in effect via the state building code, and **Exception:**

Special purpose and residential elevators are exempt from this section.

Note: The exception becomes effective August 20, 2004.

[Statutory Authority: Chapter 70.87 RCW. 04-15-104, § 296-96-02355, filed 7/20/04, effective 8/20/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02355, filed 12/22/00, effective 1/22/01.]

WAC 296-96-02360 What are the requirements for installation and operation of hall lanterns?

(1)) Desined an installed as to the ANSI A117.1 code in effect via the state building code, and EXCEPTION:

Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02360, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-02360, filed 12/22/00, effective 1/22/01.]
Moved to machine room.

WAC 296-96-02363 What are the requirements for fire doors installed in front of hoistway doors? If fire and/or smoke doors are required to be installed by the International Building Code or the local building official they must not:

(1) Be permanently attached to the hoistway door assembly.

(2) Encroach upon the full width and height of the hoistway door opening.

(3) Ensure the adhearance to ANSI A117.1 as to hall buttons, lanters, jamb markings, key switches and position indicators.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02363, filed 5/28/04, effective 6/30/04.

LULA

WAC 296-96-02317 When does the department require a local building official to sign off for the installation of LULAs, stair lifts, inclined wheelchair lifts and vertical wheelchair lifts? In existing buildings where LULAs, stair lifts, inclined wheelchair lifts and vertical wheelchair lifts are to be installed, the local building official must signify that he/she is allowing this type of conveyance on a form provided by the department.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02317, filed 5/28/04, effective 6/30/04.]

WAC 296-96-02318 What are the general requirements for LULA elevators? (1) LULAs may be permitted in churches, private clubs, and buildings listed on the historical register that are not required to comply with accessibility requirements.

(2) Installation of LULAs in existing buildings that are not required to comply with accessibility requirements, will be considered on a case-by-case basis by the department.

(3) For LULAs installed according to subsections (1) and (2) of this section a form provided by the department must be signed by the local building official.

(4) LULAs must be equipped with an emergency communication device meeting the requirements of WAC 296-96-02330.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02318, filed 5/28/04, effective 6/30/04.]

Moved to machine room

Moved to Car

WAC 296-96-02282 What is required for fire fighters' service? This needs to be relocated to a maintenance section of the WAC It is the owner's responsibility to test fire fighters' service operation of Phase I and Phase II key switches quarterly. A log with dates and the initials of the person performing the test must be posted in the machine room.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-02282, filed 5/28/04, effective 6/30/04.]

Moved to machine room.

Moved to Car

Moved to Hoistway & pit
Moved to Car

Moved to Car

Moved to Car
Moved to LULA
Moved to Car

Moved to outside hoistway

Moved to Hoistway & Pit

Accessibility equipment

PART C1 - MINIMUM STANDARDS FOR ALL MATERIAL LIFTS
Note: this section replaces material lifts in ASME A17.1

WAC 296-96-05010 What are the department's defining rules on material lifts?

(1) These rules define a "material lift" as a fixed stationary conveyance that:

(a) Has a car or platform moving in guides;

(b) Serves two or more floors of a building or structure;

(c) Has a vertical rise of at least 5 feet and no more than 60 feet;

(d) Has a maximum speed of 50 feet per minute;

(e) Is not part of a conveying system but is an isolated self-contained lift;

(f) Travels only in an inclined or vertical direction;

(g) Is operated or supervised by an individual designated by the employer;

(h) Is installed in a commercial or industrial area not accessible to the general public; and

(i) May not be operated from within the car.

(2) Material lifts must not carry people so their operation or failure will not endanger people working near them. WAC 296-96-05010 through 296-96-05290 establishes requirements for the construction, installation, and operation of material lifts. These rules allow certain conveyances designed solely to transport material and equipment to be constructed to less stringent and costly standards than ASME A17.1.

These rules do not apply to conveyances that lack a car (platform) and use rollers, belts, tracks, power conveyors, or similar carrying (loading) surfaces. (See ASME/ANSI B20.1.)

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-05010, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-05010, filed 12/22/00, effective 1/22/01.]

WAC 296-96-05120 What requirements apply to car operating devices, terminal stopping devices and electrical protective devices? If electrically operated, such devices must be enclosed. On lifts driven by winding drum machines, there must be a slack rope device employing an enclosed electric switch (manually reset type) which halts power to the drum and brake when the hoisting rope becomes slack.

On other lifts suspended by flexible means, such as chain there must be a slack rope/chain device employing an enclosed electric switch (manually reset type) which halts power to the machine and brake when the suspention means becomes slack. * Febuary 05

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-05120, filed 12/22/00, effective 1/22/01.]

WAC 296-96-05160 What types of ropes, chains, and rope connections must be used on a lift? (1) The following general requirements apply:

(a) Iron (low carbon steel) or steel wire ropes with fiber cores must be used to suspend cars and counterweights.

(b) The minimum safety factor for suspension ropes must be 6 times the manufacturers rated breaking strength per rope.

(c) The car, the counterweight end of the car and the counterweight wire ropes (or the stationary hitch ends where multiple roping is used) must be fastened so that the looped ends of the turned back portion in the rope sockets are clearly visible. Fastenings must either be:

(i) Individual tapered, babbitted rope sockets; or

(ii) Other types of department approved rope fastenings.

(d) Rope sockets must develop at least 80 percent of the breaking strength of the strongest rope used in the sockets.

(e) U-bolt rope clips (clamps) cannot be used for load fastenings.

(f) A metal or plastic data tag must be securely attached to one of the wire rope fastenings each time the ropes are replaced or reshackled. The data tag must include:

(i) The diameter of the ropes in inches; and

(ii) The manufacturer's rated breaking strength.

(iii) All replacements of wire rope or chain must be in accordance with the lift manufacturer's specifications.

(iv) The month and year the ropes were installed. * February 05

(v) The name of the person or organization who installed the ropes. * Febuary 05

(2) The following requirements apply to specific types of material lifts:

(a) Traction type lifts must use at least three hoisting ropes.

(b) Lifts suspended by hoisting chains must comply with the chain manufacturer's specifications for maintenance, inspection, and application.

(c) Lifts using roller chain type lifting chains must use chains with a six to one safety factor based on ASME/ANSI B-29.1M minimum (not average) chain strength.

(d) Drum type lifts, must use either at least two hoisting ropes or a secondary as well as a primary load path to the hoist must be employed. Also, the cable secured to the drum must be at least one and one-half turns around the drum when the carrier is at its extreme limit of travel.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-05160, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-05160, filed 12/22/00, effective 1/22/01.]

PART C2 - CONSTRUCTION, OPERATION, MAINTENANCE AND INSPECTION OF INCLINED PRIVATE RESIDENCE ELEVATOR FOR TRANSPORTING PERSON(S).

WAC 296-96-07030 Does the department approve private residence elevator plans and specifications? Yes. (1) Before commencing construction of any inclined private residence elevator the licensed installer must submit complete plans and specifications to the department for approval.

(2) Plans and specifications covering the installation of an inclined private residence elevator must be endorsed by a professional engineer before the department will approve the plans.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-07030, filed 12/22/00, effective 1/22/01.]

WAC 296-96-07050 What are the construction requirements for car landing enclosures and gates for inclined private residence elevators? Any landing enclosures and gates must have:

(1) A railing at least 42 inches high to protect all landing platforms and those areas of a building used as landing platforms; and

(2) A gate whose height is equal to the height of the railing to protect the passenger landing opening.

(a) Gates may either be a horizontally sliding type or a swing type; and

(b) All gates must be equipped with a latch that holds the gate closed and an electrical contact to prevent movement of the car when a gate is open.

(3) Railing enclosure and Gait shall reject a 1.5” dia. Ball. * Febuary 05

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-07050, filed 12/22/00, effective 1/22/01.]

WAC 296-96-07120 What construction requirements apply to car doors and gates?

(1) All car entrances must be protected by a door or gate. The height of the door or gate must be at least 42 inches and equal to the height of the car enclosure. Doors and gates may be either of a solid design or an openwork design. If of an openwork design, the door or gate must be able to reject a 1.5 * Febuary 05 inch diameter ball.

(2) Car doors or gates must be equipped with an electric contact that prevents the elevator from operating unless the door or gate is securely closed. If the gate is a swing type opening outward from the car, the electric contact must not be made until the gate is securely latched.

(3) All car doors or gates must be manually operated.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-07120, filed 12/22/00, effective 1/22/01.]

WAC 296-96-07210 What are the construction requirements for suspension methods? (1) When a chassis is suspended from a driving machine by a wire rope, a single method of suspension may be used. The suspension means may be any one of the following:

(a) Steel elevator wire rope;

(b) Steel aircraft cable; or

(c) Roller chain conforming to ANSI transmission roller chains and sprocket teeth.

(2) Steel tapes must not be used as a suspension method.

(3) The minimum diameter of hoist ropes or cables must be 1/4 inch aircraft cable and 3/16 inch for galvanized elevator wire rope.* February 05

(4) Factor of safety:

(a) The minimum factor of safety for a suspension method is 8 based upon the rope tension while elevating a car carrying its rated load.

(b) In no case, must the rated breaking strength of the rope be less than 4,000 pounds.

(5) The contact arc of a wire rope on a traction sheave must be sufficient to produce adequate traction under all load conditions.

(6) All wire ropes anchored to a winding drum must have at least one full turn of rope on the drum when the car or counterweight reaches its over-travel limit.

(7) The winding-drum ends of car and counterweight wire ropes must be secured by:

(a) Clamps on the inside of the drum; or

(b) Return loop; or

(c) Properly made individual tapered babbitted sockets; or

(d) Properly attached fittings recommended by wire rope manufacturers.

(e) U-bolt type clamps must not be used.

(8) The ends of wire ropes must be fastened to cars or counterweights by:

(a) Return loop; or

(b) Properly made individual tapered babbitted sockets that conform to ASME A17.1 requirements. (The diameter of the hole in the small end of the socket must not exceed the nominal diameter of the rope by more than 3/32 inch.); or properly attached fittings recommended by wire rope manufacturers.

(c) U-bolt type clamps must not be used.

(9) Rope repair:

(a) Car and counterweight wire ropes cannot be lengthened or repaired by splicing.

(b) If a single wire rope in a set is worn or damaged and needs to be replaced, the entire set must be replaced.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-07210, filed 12/22/00, effective 1/22/01.]

PART C3 - CONSTRUCTION, OPERATION, MAINTENANCE AND INSPECTION OF PRIVATE RESIDENCE CONVEYANCES FOR TRANSPORTING ONLY PROPERTY.

WAC 296-96-08200 What are the requirements for the activation and operation of an inclined private residence conveyances for transporting property? (1) If activation of the conveyance is by key switch, key pad or swipe card, the activation and operation must conform to the requirements of (a) and (b) of this subsection. The department may approve alternative methods of equal security.

(a) The key or code must be entered each time to move the conveyance.

(b) Key-operated switches must be of the spring return type and must be operated by a weatherproof cylinder type lock having not less than five pin or five disc combination with the key removable only when the switch is in the off position.

(2) If activation is provided by a timing circuit that only permits the circuits to be initiated or unlocked for a sufficient amount of time to allow the loading of materials, the operating circuits must automatically relock:

(a) If the conveyance is not activated within its preset period of time;

(b) When any landing stop button is activated; or

(c) When the car has completed transit to another landing or returns to the departure landing.

(3) Emergency stop switches must be provided on or adjacent to the operating station. Stop switches:

(a) May be of a momentary type;

(b) Must have red handles or buttons and be conspicuously marked "STOP"; and

(c) Must open even if springs fail when springs are used.

(4) After initiation of stopping, the car may not automatically restart. Run condition must be manually initiated.

(5) Design and installation of control and operating circuits must meet the following:

(a) Control systems based upon the completion or maintenance of an electric circuit must not be used for interrupting power and applying machine brakes at terminals, stopping elevators when an emergency stop switch is open or when any electrical protective device operates, or for stopping a machine when the safety applies.

(b) If springs are used to activate switches, contact, or circuit breaking relays to stop the elevator at a terminal, the springs must be a restrained compression type.

(6) Hand rope operation must not be used.

* February 05

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-08200, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-08200, filed 12/22/00, effective 1/22/01.]

WAC 296-96-08210 What are the requirements for suspension methods? (1) When a chassis is suspended from a driving machine by a wire rope, a single method of suspension may be used. The suspension means may be any one of the following:

(a) Steel elevator wire rope;

(b) Steel aircraft cable; or

(c) Roller chain conforming to ANSI transmission roller chains and sprocket teeth.

(2) Steel tapes must not be used as a suspension method.

(3) The minimum diameter of hoist ropes or cables must be 1/4 inch aircraft cable and 3/16 inch for galvanized elevator wire rope.* February 05

(4) Factor of safety:

(a) The minimum factor of safety for a suspension method is 5 based upon the rope tension while elevating the elevator carrying its rated load.

(b) In no case, must the rated breaking strength of the rope be less than 4,000 pounds.

(5) The contact arc of a wire rope on a traction sheave must be sufficient to produce adequate traction under all load conditions.

(6) All wire ropes anchored to a winding drum must have at least one full turn of rope on the drum when the car or counterweight reaches its over-travel limit.

(7) The winding-drum ends of car and counterweight wire ropes must be secured by:

(a) Clamps on the inside of the drum;

(b) Return loop;

(c) Properly made individual tapered babbitted sockets; or

(d) Properly attached fittings recommended by wire rope manufacturers. U-bolt type clamps must not be used.

(8) The ends of wire ropes must be fastened to cars or counterweights by:

(a) Return loop;

(b) Properly made individual tapered babbitted sockets that conform to ASME A17.1 requirements (The diameter of the hole in the small end of the socket must not exceed the nominal diameter of the rope by more than 3/32 inch.); or

(c) Properly attached fittings recommended by wire rope manufacturers. U-bolt type clamps must not be used.

(9) Rope repair:

(a) Car and counterweight wire ropes cannot be lengthened or repaired by splicing.

(b) If a single wire rope in a set is worn or damaged and needs to be replaced, the entire set must be replaced.

(10) A metal or plastic data tag must be securely attached to one of the wire rope fastenings each time the ropes are replaced or reshackled. The data tag must include:

(a) The diameter of the ropes in inches; and

(b) The manufacturer's rated breaking strength.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-08210, filed 12/22/00, effective 1/22/01.]

PART C4 - TEMPORARY HOISTS

Personnel Hoists

WAC 296-96-09001 What regulations apply to personnel hoists? All personnel hoists installed, maintained, repaired and tests must comply with the American National Standard Institute ANSI A10.4.2004 edition or the latest published edition adopted by ANSI, Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-09001, filed 12/22/00, effective 1/22/01.]

Material Hoists

WAC 296-96-10001 What regulations apply to material hoists? All material hoists installed, maintained, repaired and tests must comply with the American National Standard Institute ANSI A10.5.1992 edition or the latest published edition adopted by ANSI, Safety Requirements for Material Hoists.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-10001, filed 12/22/00, effective 1/22/01.]

PART C5 - ADDITIONAL TYPES OF CONVEYANCES

Belt Manlifts

WAC 296-96-11001 What regulations apply to belt manlifts? WAC 296-96-11016 through 296-96-11070 applies to all existing belt manlifts. Belt manlifts installed between July 1, 2004 and January 1, 2007 must meet the requirements in ASME A90.1-1997. After the effective date of these rules all belt manlifts must be installed, maintained, repaired and tested according to ASME A90.1-2003.. All maintenance inspections, acceptance and annual tests shall conform to section 8 and appendix II of ASME A90.1.-2003. Maintenance inspection report shall be kept in a secure location within the building the belt manlift serves.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-11001, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-11001, filed 12/22/00, effective 1/22/01.]

WAC 296-96-11005 What maintenance and testing is required on belt manlifts? After the effective date of these rules all belt manlift alteration, maintenance, repair and testing shall be according to ASME A90.1-2003. All maintenance inspections, acceptance and annual tests shall conform to section 8 and appendix II of ASME A90.1.-2003. Maintenance inspection report shall be kept in a secure location within the building the belt manlift serves.

WAC 296-96-11045 What drive machine requirements apply to belt manlifts? (1) Belt manlifts must be driven either by directly connected machines or by multiple "V" belts.

(2) Cast iron gears must not be used.

(3) Brakes:

(a) On direct connected machines, the brake must be mechanically applied to the motor shaft and released electronically.

(b) On "V" belt driven machines, the brake must be mechanically applied to the input shaft and released electronically.

(c) All brakes must be capable of stopping and holding the lift while carrying its rated capacity.

(4) Belts:

(a) Belts may not have more than one splice per belt.

(b) There shall not be more than one inch of space between the opposing ends of the belt.

(c) A belt manlift that has evidence of severe belt damage must be removed from service immediately. Belts with severe belt damage may not be repaired and/or returned to service. "Severe belt damage" means that the protective outer cover of a belt becomes cut, cracked or separated exposing damaged inner fabric, and such damage extends across the full width of the belt, spans between adjacent bolt holes, or damage goes through the entire thickness of the inner fabric. A torn belt is also considered severe.

Exception: A lap splice that has become cracked or damaged may be converted to a butt splice and returned to service, provided that the damaged area on the splice is completely removed.

(d) The conversion of a lap splice to a butt splice does not constitute a repair.

(e) A belt that has evidence of superficial belt cover damage while in use on a manlift is not required to be replaced. "Superficial belt cover damage" means that the protective outer cover of a belt becomes scratched, cut or cracked exposing the inner fabric. Such damage may not be continuous across the full width of the belt.

(5) Belts fastening:

(a) Belts must be fastened either by a lap splice or a butt splice with a strap on the belt side opposite the pulley.

(b) For lapped splices on manlifts with travel distances not exceeding 100 feet, the overlap of the belt at the splice must be at least 3 feet; or

(c) For lapped splices exceeding 100 feet, the overlap at the splice must be at least 4 feet.

(d) For butt splices on manlifts with travel distances not exceeding 100 feet, the strap must extend at least 3 feet on one side of the butt; or

(e) For butt splices not exceeding 100 feet, the strap must extend at least 4 feet on one side of the butt.

(f) For 12-inch belts, the joint must be fastened with a minimum of 20 special elevator bolts with minimum diameters of 1/4 inch. To effectively cover the belt joint area, these bolts must be arranged symmetrically in 5 rows.

(g) For a 14-inch belt, the minimum number of bolts is 23.

(h) For a 16-inch belt, the minimum number of bolts is 27.

(6) All installations must use machines designed and constructed to hold the driving drum when there is shaft failure or overspeed.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-11045, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034,

70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-11045, filed 12/22/00, effective 1/22/01.]

Mechanized Parking Garage Equipment

PART D - REGULATIONS FOR EXISTING ELEVATORS, DUMBWAITERS, AND ESCALATORS

Regulations for Existing Electric Elevators, Direct Plunger and Roped Hydraulic Elevators, Escalators used to transport passengers, Electric and Hand-powered Dumbwaiters, Hand-powered Elevators, Inclined Stairway Chairlifts, Inclined and Vertical Wheelchair Lifts, and Sidewalk Elevators

NOTE: The following rules set the minimum standard for existing elevators, dumbwaiters, and escalators, and, where applicable, alterations.

WAC 296-96-23100 Are keys required to be on-site? Yes. The keys to the machine room and the keys that are necessary to operate the elevator must be located in a locked key retainer box in the elevator lobby; or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage through locked doors. The key retainer box must be:

- Readily accessible to authorized personnel;
- Clearly labeled "Elevator"; and
- Equipped with a 1-inch cylinder cam lock key #39504.

Further:

- Keys for access to elevator machine rooms and for operating elevator equipment must be tagged and kept in the key box.
- The key box must contain all keys necessary for inspections of the elevator.
- Mechanical hoistway access devices must be kept in the key box or machine room.

The department may approve existing retainer boxes provided they are:

- Readily accessible to authorized personnel;
- Clearly labeled "elevator"; and
- The lock must be either a 1-inch cylinder cam lock key #39504 or a combination lock. The combination for the lock must be on record with the department.

Deveations from rule 23100 due to security concerns must be approved by the department via a variance request.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-23100, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-23100, filed 12/22/00, effective 1/22/01.]

Section 1

Hoistways

WAC 296-96-23116 What requirements apply to car numbers? In any building with more than one elevator, numbers at least two inches in height identifying each car must be located at the main lobby entrance, inside the car, on the machine, on the disconnect switch and if the conveyance has a walk in pit the buffer stands. *February 05

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-23116, filed 12/22/00, effective 1/22/01.]

WAC 296-96-23117 What requirements apply to top of car railings for traction elevators? A standard railing must be installed on the top of all traction elevators where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds twelve inches horizontal clearance. The railing shall be substantially constructed of metal and shall consist of a top rail, intermediate rail and post. The top rail shall have a smooth surface and the upper surface shall be located at a vertical height of forty-two inches. The intermediate rail shall be located approximately halfway between the top rail and the car top. There must be a minimum of six inches of clearance above the top rail when the car is at its furthest point of travel. If the vertical clearance from the cartop to the hoistway enclosure, including gravity stopping distance is less than 48 inches, do not install the top of car railing, instead provide signage required by WAC 296-96-119.*February 05

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-23117, filed 5/28/04, effective 6/30/04.]

WAC 296-96-23118 What requirements apply to top of car railings for hydraulic elevators in unenclosed hoistways? A standard railing must be installed on the top of hydraulic elevators installed in unenclosed hoistways. The railing shall be substantially constructed of metal and shall consist of a top rail, intermediate rail and post. The top rail shall have a smooth surface and, where practical, the upper surface shall be located at a vertical height of forty-two inches. The intermediate rail shall be located approximately halfway between the top rail and the car top. There must be a minimum of six inches of clearance above the top rail when the car is at its furthest point of travel on the mechanical stop. If the vertical clearance of 6 inches cannot be achived, do not install car top railing, instead provide signage required by WAC 296-96-119.*February 05

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-23118, filed 5/28/04, effective 6/30/04.]

WAC 296-96-23119 What signage requirements apply to traction elevators with minimal overhead clearance? Elevators that do not have a minimum of twenty-four inches of clearance from the crosshead, or any equipment mounted on the crosshead, to the lowest member of the overhead structure in the hoistway when the car has reached its maximum upward movement must have signage. A sign must be located near the top of car inspection station. An additional sign must be posted on the hoistway wall. This sign must be visible when accessing the car top. The sign shall consist of alternating four-inch diagonal red and white stripes and must clearly state "danger low clearance" in lettering not less than four inches in height.

*February 05 Requested language; Elevators that have less than 48 inches of vertical clearance from the cartop to the hoistway enclosure when the car is at its furthest point of mechanical travel must have signage.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-23119, filed 5/28/04, effective 6/30/04.]

Section 4

Lighting of Step Treads

WAC 296-96-23450 What requirements apply to step tread lighting? * February 05 discussion= Step treads and landings must be illuminated throughout. The light intensity on the treads must not be less than 5 ftc (54 lx).

The illumination shall be of uniform intensity and contrast materially with that of the surrounding area.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-23450, filed 12/22/00, effective 1/22/01.]

WAC 296-96-2345? What requirements apply to comb and step distinction?
There shall be a visual contrast between the comb and step, achieved by color, pattern, or texture.
* February 05 more discussion needed

WAC 96-2345? What requirements apply to safety zone?
The entry and exit zone shall be kept clear of all obstacles. The width of the zone shall be not less than the width between the centerlines of the handrails plus 8 inches. The length of the zone, measured from the end of the newel, shall be not less than twice the distance between the centerlines of the handrails.

Exception: On the entrance side, the safety zone distance may be reduced, when cart restriction devices are installed, with prior written permission.
* February 05, more discussion needed.

WAC 296-96-2345? What requirements apply to landing access plates?

Access plates at the top and bottom landings shall be properly located and securely fastened in place when no more than 70 lbf effort is required to open the access plate.

Subpart VI

Alterations, Repairs and Maintenance

WAC 296-96-23600 What is the scope of Part VI, Alterations, Repairs and Maintenance? Subpart VI, Alterations, Repairs and Maintenance, applies to periodic inspections, tests, alterations, and maintenance. The applicable code refrences are; ASME A17.1-Part 8, ASME A18.1-Part 10, ASME A90.1-part 8 and appendix 2, ANSI A10.4-part 26 & 27, ANSI A10.5- part 4, and other requirements as stated in this chapter.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-23600, filed 12/22/00, effective 1/22/01.]

WAC 296-96-23610 What requirements apply to routine periodic inspections and tests? The owner or the owner's agent must ensure that her/his conveyances are inspected and tested on a periodic annual basis by a person qualified to perform such services. All conveyances must be tested to the applicable code(s) by an elevator mechanic licensed in the appropriate category for the conveyance being tested. (see appendix N in ASME A17.1)

(1) For annual testing of electric, hydraulic, and roped hydraulic elevators, a log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the qualified person performing the test.

a) It is the responsibility of the owner or the owners' representative to install a updated log sheet in

the machine room, the outdated log shall remain posted in the machine room.

Note: The fire service keyswitch and smoke detector testing may be performed and logged by the building owner.

(2)(a) For five-year testing of electric and roped hydraulic elevators a full load safety test must be performed with weights.

(b) For roped hydraulic elevators a static load test with the full load on the car must also be performed.

(c) For tests administered under this subsection:

(i) A log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the licensed elevator mechanic performing the test.

Move the keyswitch note to here.

(ii) A safety tag with the date and company conducting the test must be permanently attached to the governor, safeties, and the rupture valves with a wire and seal. For VPL and stair chairs located at the disconnecting means.

(iii) Documentation must be submitted to the department with the proper form.

Note: Separate safety tags must be used to distinguish the no-load annual safety test and the five-year full load test.

(d) Qualified people will conduct the test. A qualified person is either:

(i) An elevator mechanic licensed in the appropriate category for the conveyance being tested;

(ii) The representative of a firm that manufactured the particular material lift, and who holds a current temporary mechanic's license in this state; or

(iii) The representative of a firm that manufactured the particular material lift who is working under the direct supervision of an elevator mechanic licensed in the appropriate category for the conveyance being tested.

Escalators shall be tested and cleaned annually. Upon completion of this work, the appropriate form indicating that the work was done must be submitted to the department.

(3) All other conveyances requiring annual testing must have tags indicating the date and the name of the company who performed the test. When the required location for mounting the tag is not readily accessible, the tag may be mounted on the main line disconnect.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. 04-12-047, § 296-96-23610, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-23610, filed 12/22/00, effective 1/22/01.]

WAC 296-96-23620 What requirements apply to alterations, repairs and maintenance? The owner or the owner's agent is responsible for the safe operation, proper maintenance, and alteration of his or her conveyance(s) and must comply with the present adopted ASME A17.1, Part 8.

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-23620, filed 12/22/00, effective 1/22/01.]

Subpart VII

Lifts for Physically Handicapped

WAC 296-96-23710 What requirements apply to lifts for the physically handicapped? Inclined and vertical chairlifts and inclined and vertical wheelchair lifts installed only for use by persons with disabilities in locations other than in or at a private residence may be equipped with a standard electric switch. If so equipped it shall use a Chicago lock with key #2252 and be equipped as outlined for attendant operation. The lift shall be key operated if the location of the lift is not in common pathways were vandalism or horseplay is a concern.

This requirement is in addition to ASME A18.1in effect, and the current Washington state rules and regulations on barrier-free design located in ANSI A117.1in effect via the State Building Code (IBC).

[Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. 01-02-026, § 296-96-23710, filed 12/22/00, effective 1/22/01.]